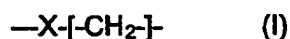


**CLAIMS.**

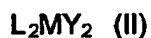
1. A method for preparing a dissolved catalyst component comprising the steps  
 5 of:

a) providing a halogenated precursor component of formula (I)



b) reacting the halogenated precursor with an ionic liquid precursor in a  
 10 solvent to prepare an ionic liquid;

c) mixing in a solvent one equivalent of the ionic liquid prepared in step b)  
 with a metallic complex of formula (II)



wherein L is a coordinating ligand for the metallic site, said coordination  
 15 being achieved by phosphorus, nitrogen or oxygen;

d) evaporating the solvent; and

e) retrieving a hybrid single site catalyst component/ionic liquid system.

20 2. The method of claim 1 wherein the ionic liquid precursor is N -alkyl-  
 imidazolium or pyridinium.

3. The method of claim 1 or claim 2 wherein between step b) and step c), the  
 reaction product of step b) is reacted with an ionic compound  $\text{C}^+\text{A}^-$ , wherein  
 25  $\text{C}^+$  is a cation selected from  $\text{K}^+$ ,  $\text{Na}^+$ ,  $\text{NH}_4^+$ , and  $\text{A}^-$  is an anion selected from  
 $\text{PF}_6^-$ ,  $\text{SbF}_6^-$ ,  $\text{BF}_4^-$ ,  $(\text{CF}_3\text{—SO}_2)_2\text{N}^-$ ,  $\text{ClO}_4^-$ ,  $\text{CF}_3\text{SO}_3^-$ ,  $\text{NO}_3^-$  or  $\text{CF}_3\text{CO}_2^-$ .

4. The method of any one of the preceding claims wherein the solvent used  
 in steps b) and step c) is selected from THF,  $\text{CH}_2\text{Cl}_2$  or  $\text{CH}_3\text{CN}$ .

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5. A hybrid organometallic complex/ionic liquid system obtainable by the method of any one of claims 1 to 4.
6. A hybrid catalyst system comprising the hybrid organometallic complex/ionic liquid system of claim 5 and an activating agent.
7. The hybrid catalyst system of claim 6 wherein the activating agent is methylaluminoxane and wherein Y is a halogen.
8. The hybrid catalyst system of claim 7 wherein the amount of methylaluminoxane is such that the Al/M ratio is of from 100 to 1000.
9. A method for homopolymerising or copolymerising alpha -olefins that comprises the steps of:
- heterogenising the hybrid catalyst system of any one of claims 6 to 8 by addition of an apolar solvent ;
  - injecting into the reactor an apolar solvent and the heterogenised catalyst system of step a)
  - injecting the monomer and optional comonomer into the reactor;
  - maintaining under polymerisation conditions;
  - retrieving the polymer under the form of chips or blocks.
10. The method of claim 9 wherein the apolar solvent is n -heptane.
11. The method of claim 9 or claim 10 wherein the monomer is ethylene or propylene.
12. A polymer having particle sizes of at least 0.5 mm obtainable by the process of any one of claims 9 to 11.